



Knowbella Tech

Blockchain-enabled Scientific Collaboration with Helix™,
The Currency of Science™

The Knowbella Platform™ is crowdsourcing scientific intellectual properties

Ticker: HELIX

Initial Price: \$0.30 USD or equal amount of Ether.

Selling 165,000,000 Helix tokens

Hard Cap: \$50,000,000 USD

Mark Pohlkamp, CEO

Mark@Knowbella.Tech

+1.513.260.4400

PO Box 30085

Cincinnati, OH 45230

Website: <https://Knowbella.Tech>

Twitter: <https://twitter.com/Knowbella>

Bitcointalk.org: KnowbellaTech

LinkedIN: <https://www.linkedin.com/company/11390791/>

Facebook: <https://www.facebook.com/KnowbellaTech/>

Telegram: <https://t.me/knowbella>

19 January 2018

Trademarks

Knowbella Platform™ will be a registered trademark of Knowbella Tech, LLC ("Knowbella" or "Knowbella Tech"). Helix™ will be a registered trademark of Knowbella Tech. "The Currency of Science™" will be a registered trademark of Knowbella Tech. "The Scientific Currency™" will be a registered trademark of Knowbella Tech. All other trademarks or registered trademarks used herein are the property of their respective owners.

Disclaimer

The information provided in this document is provided "as is" without warranty of any kind. Knowbella Tech disclaims all warranties, either express or implied, including the warranties of merchantability and fitness for a particular purpose. In no event shall Knowbella Tech be liable for any damages whatsoever including direct, indirect, incidental, consequential, loss of business profits or special damages, even if Knowbella Tech or its suppliers have been advised of the possibility of such damages.

Document Lifetime

Knowbella Tech may occasionally update online documentation between releases of the related software. Consequently, if this document was not downloaded recently, it may not contain the most up-to-date information. Please refer to <https://Knowbella.Tech> for the most current information. From the Web site, you may also download and refresh this document if it has been updated, as indicated by a change in this date: 22 December 2017.

Where to get help

Knowbella Tech support, product, and licensing information can be obtained as follows:

Product information — For documentation, release notes, software updates, or for information about Knowbella Tech products, licensing, and service, go to the Knowbella Tech website.

Technical support — For technical support, go to <https://Knowbella.Tech> and select "Support". On the Support page, you will see several options, including one for making a service request.

Your comments

Your suggestions will help us continue to improve the accuracy, organization, and overall quality of the user publications. Please send your opinion of this document to: Info@Knowbella.tech.

If you have issues, comments, or questions about specific information or procedures, please include the title and, if available, the part number, the revision, the page numbers, and any other details that will help us locate the subject that you are addressing.

Legal Disclaimer

THIS DOCUMENT DOES NOT GIVE PERSONAL LEGAL OR FINANCIAL ADVICE. YOU ARE STRONGLY ENCOURAGED TO SEEK YOUR OWN PROFESSIONAL LEGAL AND FINANCIAL ADVICE.

This document is for informational purposes only and does not constitute an offer or solicitation to sell securities in any jurisdiction. Any such offer or solicitation will be made only by means that are in compliance with applicable securities and other laws, including Regulation D and Regulation A of the Securities Act of 1933. No information or opinions presented herein are intended to form the basis for any purchase decision, and this document does not constitute investment advice or counsel. This document is not part of, and may not be relied on in connection with, any contract or commitment

whatsoever. Any purchase or sale involving Knowbella Tech will be set forth and governed exclusively by other documents. Knowbella Tech expressly disclaims any and all responsibility for any direct or consequential loss or damage of any kind whatsoever arising directly or indirectly from: (i) reliance on any information contained in this document; (ii) any error, omission or inaccuracy in any such information; and (iii) any action resulting therefrom.

No regulatory authority has examined or approved of any of the information provided in this document.

This document contains forward-looking statements that are based on Knowbella Tech's current understanding, expectations, and assumptions, which Knowbella Tech believes to be reasonable. These statements involve inherent risks and uncertainties, including those relating to our early stage of development, ability to attract users and grow our business, regulatory matters, and matters bearing on cryptocurrencies generally. These risks and uncertainties may cause actual results to differ materially from those expressed or implied by such forward-looking statements. You should not place undue reliance on such statements, and no representation is or can be made as to their attainability or accuracy.

This document is written as of its date and Knowbella Tech undertakes no obligation to update any statements herein, except as may be required by law.

This document does not constitute an agreement that binds Knowbella Tech. Knowbella Tech, its directors, officers, managers, members, employees and agents do not warrant or assume any legal liability arising out of or related to the accuracy, reliability, or completeness of any material contained in this document.

There are risks and uncertainties associated with Knowbella Tech and the Knowbella Platform™ and its respective business and operations, the Helix™ token and the ICO. For a full list of the risks and liabilities, refer to the full risk factors set forth in the offering circular.

The offering will be made only by means of an offering circular. An offering statement on Form 1-A relating to these securities will be filed with the Securities and Exchange Commission and it will need to become qualified by the Securities and Exchange Commission before the offering may commence. You may obtain a copy of the preliminary offering circular contained in the offering statement when it becomes available by visiting the Company's website at <https://Knowbella.tech>.

These securities may not be sold nor may offers to buy be accepted prior to the time the offering statement is qualified. This whitepaper shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

No money or other consideration is being solicited in connection with this whitepaper, and if sent in response, will not be accepted. No offer to buy the securities can be accepted and no part of the purchase price can be received until the offering statement on Form 1-A is qualified pursuant to Regulation A of the Securities Act of 1933, as amended, and any such offer may be withdrawn or revoked, without obligation or commitment of any kind, at any time before notice of its acceptance is given after the qualification date. Any person's indication of interest involves no obligation or commitment of any kind.

Table of Contents

| | |
|--|----|
| Executive Summary | 5 |
| Background..... | 6 |
| Mission..... | 7 |
| Problem..... | 7 |
| Solution and Product..... | 9 |
| The IP Collaboration Platform..... | 10 |
| Why Blockchain?..... | 12 |
| Helix™ Tokens | 16 |
| Helix™ Role & Economy | 18 |
| Voting Rights..... | 18 |
| Economic Rights | 19 |
| Helix™ Distribution | 20 |
| Incentive Plan for Scientists | 21 |
| Technical Solution & Platform Architecture | 22 |
| Business Model | 23 |
| Projections | 23 |
| Competitive Landscape | 24 |
| Addressable Market..... | 24 |
| Project Roadmap and Timeline..... | 25 |
| Team..... | 26 |
| Advisory Board | 26 |
| ICO Terms & Conditions..... | 28 |
| Legal..... | 28 |
| Supplemental Literature..... | 28 |
| Citations | 29 |

Executive Summary

We are “open sourcing” intellectual properties (IP).

Scientists. They are the most highly educated population on Earth. They increase the knowledge that changes the way we understand our world and the universe. Scientists are influencers and decision-makers at every level. Among the most highly regarded are Nobel Laureates. These scientists are influencers and key opinion leaders in their professional societies, communities, and governments around the world.



However, scientists work in a broken system dominated by a “publish or perish”. Publications are almost always driven by the ability of the researcher to gain grant funding to support the experimental work that leads to a publication. The amount of work that goes into both applying for a grant, conducting the research, and writing a manuscript is a time and labor intensive model. Knowbella Tech seeks to disrupt this system with a decentralized blockchain model. This starts with a token system that rewards scientists for conducting research.

With the Helix™ token as “The Currency of Science™”, we will move the Knowbella Platform™, the crowdsourcing scientific collaboration platform, from beta to public launch. Helix™ will be awarded to scientists who collaborate, conduct research, and write manuscripts within the Platform. Through our efforts, scientists will be able to transact their Helix™ with grant funders, vendors, and service providers. This forms an economic system that compensates scientists for conducting research in the Knowbella Platform™.



Helix™ is backed by the equity of Knowbella Tech. Every holder of Helix tokens gains H Units (the LLC equivalent of “shares”) with some economic rights and voting rights in the Company. As the Company and its Knowbella Platform™ gains in value, so do the Helix™. If the Company is purchased, the holders of Helix™ have the opportunity to exchange their Helix™ for equity in the Company and participate in the liquidity event.

Before Lyft®, no one thought to put a value on an empty car seat. With Airbnb®, many were surprised that an empty room in a home could be valued. Before Knowbella Tech (and its sister company, Open Therapeutics) orphan and dormant intellectual property (“IP”) was not economically valued. With the Knowbella Platform™, researchers can be matched with available IP around which they can collaborate, gain grants, share laboratory resources, produce publications, use a preprint server, and receive Helix™ tokens for using the Platform.

The Knowbella Platform™ brings value to the nearly \$4 trillion of orphan and dormant IP that lies unused around the world.¹ The Knowbella Platform™ connects researchers to that IP.

Through an Initial Coin Offering which we expect to qualify under Regulation A of the Securities Act of 1933 (the “ICO”), Knowbella Tech expects to launch the Helix™ token to serve as the scientific currency for researchers and scientific vendors. Researchers collaborating on the Knowbella Platform™ will be awarded Helix™ in their wallets for conducting research and collaborating. In short, the researchers get paid to do science using the Platform.

It is our understanding as of the date of this whitepaper (25 January 2018) the U.S. Securities and Exchange Commission (SEC) has not qualified under Regulation A any offering of tokens or other cryptocurrency. If the SEC qualifies Helix™ tokens under our Regulation A filing, we believe our Helix™ tokens will be uniquely situated in the market.

Background

The Knowbella Platform™ is a collaborative scientific ecosystem that crowdsources the global scientific and engineering communities around orphan and dormant IP, funding, and Helix™ tokens. Knowbella Tech's offering will significantly enable and accelerate market penetration and will leverage an existing collaborative platform, USA patent filings, and scientific users.

The global value of IP that is dormant ("orphan") is estimated to be \$4 trillion dollars.² Currently, academic institutions can utilize only about twenty percent (20%) of their intellectual property, which represents "up to \$1.3 trillion to U.S. economy and supported up to 4.2 million jobs since 1996."³

While Knowbella was launched only in September 2016, there is a rich history behind its evolution into the "Open Science" collaboration platform that it is today. This history includes an exit of a non-operating subsidiary with a patented genetically engineered bacterium that can clean wastewater and generate electricity.⁴ Then in 2014, Open Therapeutics was launched to enable researchers to use open science to pursue crowdsourcing collaborative research around therapeutic IP with a long-term objective to create a workspace, particularly for underserved researchers, to explore all IP (not just therapeutics). In 2016, Knowbella Tech exclusively licensed the U.S.A. patent-pending collaboration platform Therapoid™. While not promoted publicly at this time, the Therapoid™ platform has already begun to attract scientists around the world to its open collaboration value proposition. The public beta can be found at <https://Therapoid.net>.

Scientists labor for months (or years) to produce findings that increase knowledge and, perhaps, benefit society. The results of these findings may become publications that drive more grant funding and secure tenure or promotion for their authors. Scientists face peer review of their findings by other scientists who generously contribute their time and attention. Their published articles are then available in expensive subscription journals or, when possible, in Open Access journals funded by steep Article Processing Charges usually paid by the authors. It is a cumbersome process with many pain points, and these are the fortunate scientists. Some scientists see their findings stuck in lengthy peer review or unpublishable due to negative results or unoriginality. Underserved scientists may lack access to subscription findings or be unable to participate in the scientific process because they lack access to IP upon which to work.

It does not have to be that way.

What if we told you that we can both reward scientists for doing the science that they love and incentivize them for collaboration and peer review? What if we told you that we reduce the time to publication through a preprint server? What if we said that we could provide underserved scientists with IP – IP that would previously have languished as abandoned and without worth?

That is the promise of Knowbella Tech.

As all products and publications are based upon IP utilized within the Platform, all progress must be made available under a Creative Commons 4.0 and Copyleft model.^{5 6} The contributions also serve to enhance the social good. The Knowbella Platform™ serves as a place where inventors, institutions, researchers, educators, students and citizen scientists can work together for the benefit of humankind.

The Knowbella Tech philosophy is based upon bringing science back to collaboration, particularly among underserved scientists. This is the way science used to be. For example, in 1676, Sir Isaac Newton said, "If I have seen further, it is by standing on the shoulders of giants."⁷ Further, a literature review indicates a resurgence of collaboration and crowdsourcing among scientists (see [Supplemental Literature](#)).

Mission

Knowbella Tech's mission is to break down the patented silos of knowledge and the artificial IP borders that currently exist in research and development in order to do social good, generate economic incentives, and improve our world.

The Knowbella Platform™ potentially brings value to the nearly \$4 trillion of underused IP.⁸

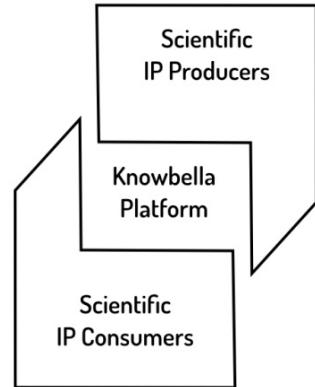
One can view Knowbella Tech as the matching service for orphan/dormant IP and IP consumers. Orphan/dormant IP is not currently valued at what it might be. Most IP consumers within the Knowbella Platform™ are scientists and researchers.

Knowbella Tech is a Disruptive Model

Open Therapeutics disrupts big-pharma by democratizing therapy innovation outside of its control and beyond its geomarket-based pricing models. Through the Knowbella Platform™ we envision expanding the Therapoid™ platform to the orphan and dormant IP in all scientific disciplines.

As an Open Science endeavor, we are disrupting the way western science in particular is conducted. One could call it democratizing science. When coupled with Open Access publishing, the Knowbella Platform™:

- 1) Breaks down current silos of information, know-how, and borders, opening individual know-how for sharing with other scientists;
- 2) Gives every scientific improvement or contribution based on that IP back to the community, making each advance more valuable for the next researcher that looks at it, adopts it, and takes it further, and so forth;
- 3) Matches IP providers and IP consumers with similar interests – an opportunity that simply does not exist in a science and IP space that has labored under a “protectionist” mentality; and
- 4) Provides economic rewards (Helix™ tokens) and decentralized management of grant funding for research.



Knowbella Tech's objectives are to generate bottom line returns for our investors, that is: profits, improved environments, and social good. We aim to help scientists around the world disseminate their research and publications and get paid to do the science at the same time.

We will also help technology transfer offices and inventors gain value from their orphan and dormant IP, as well as gain recognition for their work.

Problem

Orphan intellectual property

Unused IP sits on the shelves of many corporations, universities, inventor workspaces and other locations for reasons such as budgetary constraints, lack of market insights, lack of awareness of the IP, or lack of perceived marketability and value. Technology Transfer Officers must make tough decisions on

which IP has marketability. However, they often make those decisions based on the limits of the jurisdiction in which the IP was filed. When that IP is put in front of the global scientific community, many different opportunities never previously envisioned may be realized.⁹

Interdisciplinary open review of IP may result in new applications and stimulate discoveries that ordinarily might never develop. The wisdom of the crowd should never be discounted. Breaking down silos of locked-down knowledge could result in significant progress in ways never considered.

Locked-Down IP

Science is a social institution and activity, but in today's competitive environments, much of "modern" science is conducted in patented silos. This hinders knowledge creation, new innovations, and discoveries. By collaborating across silos, borders and institutions, we can accomplish great things and improve our world in the process. Knowbella welcomes citizen scientists, researchers, teachers, and students--any enthusiast that contributes to advancing discoveries and innovations.

Fragmented tools and services for innovators

A large number of excellent tools and services exist to support and enhance science, innovation, and development, but they are fragmented. This creates great inefficiencies that slow the pace and quality of innovation. What is needed is an end-to-end ecosystem that serves the scientist rather than serving the needs of the tool providers themselves.

Time to Market Review and Publication Takes Years

Scientists have long been frustrated with the costs, timeline, and processes required having their research reviewed and published. Due to publisher peer review and workflow processes, this can often take up to a year and require serious investment of additional researcher time. The researcher sees their intellectual property sitting idle instead of being advanced in the global community. We believe the process should serve the scientists and researchers. The Knowbella Platform™ with its preprint server seeks to support the "Open Access" publishing model. The Platform puts much of the control of publishing science back into the researcher's hands.

Public Gap

A great divide exists between the professional scientific communities and the public. Bridging this gap can lead to better science. This should increase awareness and enthusiasm toward innovation and improving our society and environment. With market acceptance of the Knowbella Platform™, more money may become available through donation, grants, and sponsored research to bridge this gap. Knowbella Tech will provide a platform to also enable everyday enthusiasts and citizen scientists to learn, collaborate, observe, donate funds, and even vote on projects that should receive funding.

Access & Underserved Scientists

There are many scientists that would like to collaborate but have limited or no access to IP. They also want access to Key Opinion Leaders who influence careers and facilitate publications and a pathway to grants. Underserved scientists have great potential to make significant contributions to science, but they lack a collaborative platform and Asset Exchange to do so. Many cannot even afford access to scientific journals. With an Open Access publication requirement in exchange for using Knowbella, collaborating scientists can gain access to knowledge in ways they could not before.

In summary, Knowbella Tech seeks to break down barriers to science by providing researchers around the world free access to our platform, IP, grants, and free laboratory equipment to advance science and the common good. This Open Data and Open Access model is novel for the modern science culture, but it returns science to the open and collaborative model that gave rise to many developments such as the cure for smallpox.¹⁰

Solution and Product

The Knowbella Platform™, through its end-to-end scientific collaboration ecosystem, is designed to solve the access challenges. The Platform will unlock orphaned IP and provide significant rewards and incentives to researchers to advance science and global collaboration. Knowbella will not only host orphan, dormant, and open IP, but it will provide grants, free laboratory equipment, access to manuscript development software, preprint server, and Helix™ tokens for those scientists using the Platform. As such, it is an end-to-end scientific collaboration ecosystem.

The grant funding management model, in partnership with a significant foundation partner, uses a U.S. patent pending model.

We are integrating partner's authorship tool. That partner has over 750,000 users. In the future, we may build our own manuscript authorship feature in order to keep the researchers and authors within our scientific research ecosystem.

The preprint server is where researchers post their manuscripts and Open Access publishers compete to publish them. The preprint server uses an artificial intelligence (AI) to enable users to search on similar manuscripts.

Knowbella Tech provides everything to the researchers under a modified Creative Commons 4.0 license and Copyleft model. To use the Knowbella Platform™ freely, researchers must agree to a Terms of Service (TOS) that requires all data and information generated by their efforts to be provided freely back to the community within the Knowbella Platform™.

An analytics dashboard that can assist with recruiting researchers can be provided to industry. The dashboard will also provide analysis of new trends and areas of scientific interest. Such information can help organizations with competitive intelligence.

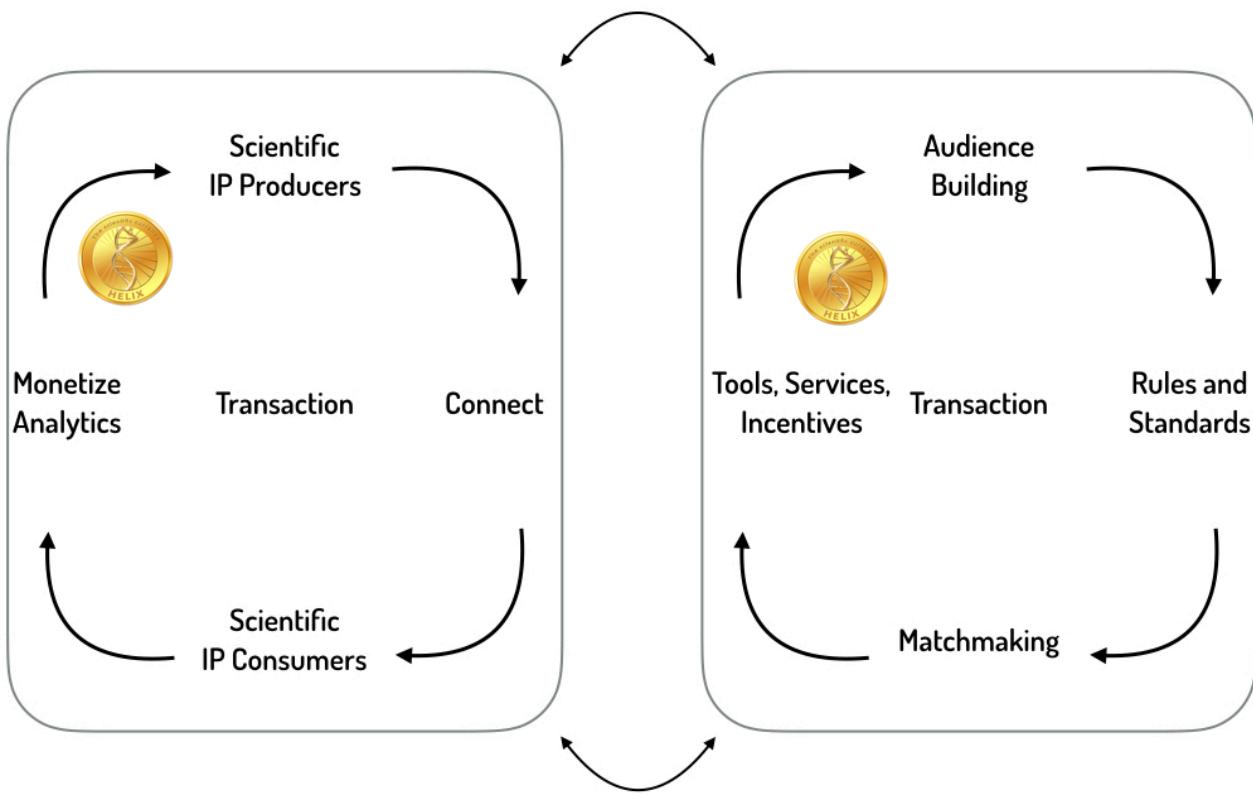
Helix™ can also be used to buy goods and services listed within the Platform's Asset Exchange. The Asset Exchange is a marketplace within the Platform where researchers can buy goods and services using Helix™. Vendors can also promote their offerings within the Asset Exchange.

Knowbella Tech will initially provide all non-therapeutic IP, while Open Therapeutics will continue to maintain its focus on only therapeutic IP. Eventually, Knowbella Tech may acquire Open Therapeutics to round out its portfolio as one unified freely available platform. Eventually these platforms could merge.

Longer term, we will continue to develop software tools and services as well as provide developer tools for the open source software community. We believe the open source community will create unimagined value as we gain critical mass in the scientific community.

How the Knowbella Platform™ Works

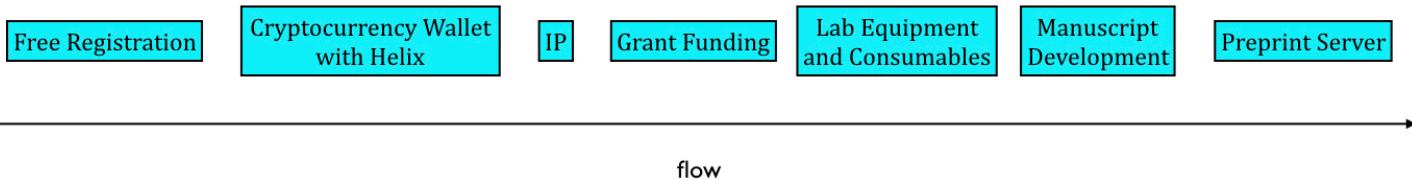
As a matchmaking service between IP producers and IP consumers, the Knowbella Platform™ creates an ecosystem of transactions. Those transactions will be done in Helix™ tokens.



The IP Collaboration Platform

The Knowbella Platform™ exclusively licensed from our sister company and partner, Open Therapeutics, is an open scientific collaboration ecosystem.

Knowbella scientific ecosystem platform



After the Helix™ token offering, Knowbella Tech will launch its scientific IP platform using the same model used by Open Therapeutics. The Knowbella Platform™ will host all IP other than therapeutic IP.

To gain interest, liquidity, and scale, up to 500,000 early adopting scientists will be compensated with Helix™ when they conduct science on the Platform.

Who is Knowbella for?

Inventors

You create knowledge. You want to distribute your knowledge around the world. You also want the opportunity to gain co-authorship of new articles generated by collaborators around your orphan IP.

What does the Inventor get for opening the orphan IP to the global scientific community?

- Compensation with Helix™ for up-to 500,000 early adopting scientists.
- International scientific collaboration opportunities.
- Co-authorship opportunities from other scientists for moving the orphan IP forward.
- Collaboration is optional, but when there is collaboration, the Inventor gains Helix™.
- Honoraria and speaking engagements from collaborators.
- Sponsored research from companies participating in the Knowbella Platform™.
- Access to grant funding.
- Help with gaining grants from funders that require Open Access (Gates Foundation, Wellcome Trust, etc.).
- Maintain knowledge leadership around the IP.
- A broader audience for your science and reputation.
- Access to a preprint server where publishers compete for your manuscript.
- The opportunity to do a social good.

Institutional Technology Transfer Officers

Orphan IP is bringing no value to the organization and inventors. In some cases, the IP might actually be costing money. By out-licensing that IP to an open platform, value can be unlocked.

What does the Technology Transfer or Intellectual Property Officer get for opening the orphan IP?

- Helix™ for early IP providers.
- Promotion of your out-licensing portfolio through Knowbella.
- An increase in the number of licenses by out-licensing the dormant and abandoned IP.
- Sponsored research brought to the attention of inventors and their organizations.
- Potential for international collaboration within your organization.
- Awareness of grant funding among researchers.
- Become a knowledge center by using the Knowbella dashboard data.
- Provide a return to taxpayers by opening the orphan IP for governments and public institutions.
- Gain or maintain positive morale of the original researcher, particularly when the IP is not moved to prosecution, abandoned, or not maintained.
- Positive brand enhancement through doing a social good by enabling scientists to develop technologies for underserved populations.

Researchers

The nature of science is collaboration. Most researchers want to collaborate. However, there is no rewards-based open science IP platform upon which they can do this. Knowbella provides this free collaborative environment. By hosting orphan IP, Knowbella helps these researchers find interesting opportunities. This enables researchers to cross borders and share knowledge.

Currently, the only economic rewards researchers gain is at the end of development in a patent that may be licensed, or in a publication that can be leveraged for grant funding or sponsored research. Providing Helix™ to scientists during the process of doing science is revolutionary. Early adopting scientists can earn Helix™ throughout the entire research process – truly “The Currency of Science™”. Those early adopting scientists will be able to exchange Helix™ for goods and services from vendors as well as other scientists.

Professors and Teachers

Since the global scientific community is freely collaborating, Knowbella is an ideal place to gain information, class notes, content for curricula, and presentations prepared by researchers. You can also integrate Knowbella into your assignments.

Students

Much new research is not incorporated into textbooks quickly enough to reflect scientific progress. With Knowbella, research can be discovered in real-time at no cost, giving students a front row seat to watch advancements. For example, students can upload their graduate thesis to gain exposure for their work rather than locked up with no further review and earn Helix™ for performing the upload.

Mentors

From experienced doctoral students to retirees, there is an opportunity for mentors to help underserved scientists collaborate. This can range from helping a researcher write a manuscript to presenting research findings at a conference.

Citizen Scientists

Those who are hobbyists or simply have an interest can enjoy the real-time research being conducted by the scientific community. Ultimately, the Knowbella Platform™ and Helix™ should comprise the online ecosystem everyone can enjoy.

Why Blockchain?

Knowbella Tech's core values are open and decentralized science. Blockchain enables a decentralized and trusted network for scientists to collaborate.

Knowbella Tech uses an Ethereum smart contract implementation for its crowdsourcing scientific collaboration platform and Helix™ tokens and wallets.

The blockchain grant model is U.S. patent-pending.

We intend to decentralize the registration of users so they can govern their own identities.

With blockchain we can create an anti-inflationary token that will be exchangeable around the world on exchanges.

Along with IP, lab equipment, and grants, smart contracts are a foundation to our platform by enabling the scientific community to decentralize and self-govern.

We plan to move from the centralized storage of scientific data to a blockchain in order to protect it against system failure and security risks. With a blockchain, the research data can be stored via an "InterPlanetary File System" (IPFS). "The InterPlanetary File System (IPFS) is a peer-to-peer distributed file system that seeks to connect all computing devices with the same system of files."¹¹

With blockchain smart contracts and immutable ledger, we can protect users from overhead fees typically associated with the conduct of science in research institutions. This will be tied to our blockchain-based grants model.

Lastly, we will eventually manage incoming as well as pre-existing IP via the blockchain. This will provide interesting protected records of inventors and their innovations providing provenance of inventions and citations.

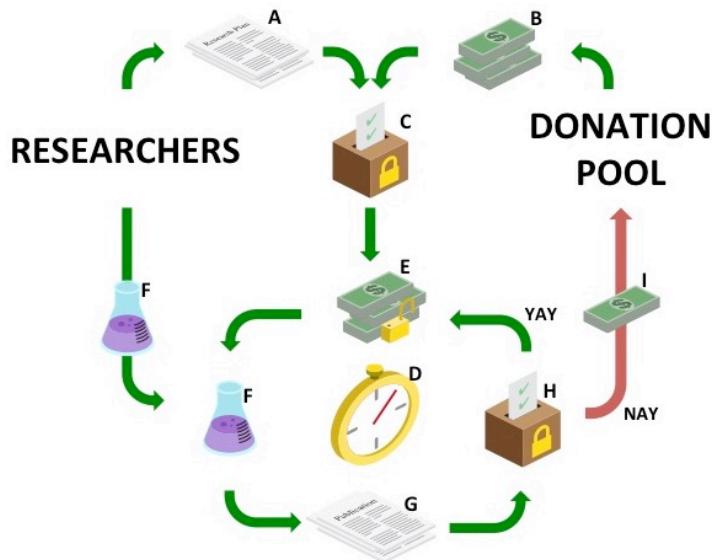
Grants

The life-blood of a scientist is a grant that provides funding. The Bill and Melinda Gates Foundation® and the Wellcome Trust® are the two largest grant funders. We intend to offer grants to scientists applying to Request for Proposals (RFPs) from grant funders. To stimulate this model, we will offer grants to the scientists in Helix™ tokens. Eventually, we anticipate matching grant funds from the large grant funders to be offered to the scientists to conduct research and produce publication outputs.

One of the key uses of the blockchain by Knowbella Tech is for managing grant funding. By removing the expensive overhead of grant management usually conducted by attorneys and accountants, the blockchain will enable a higher amount of money to go directly to the scientists.

The scientists decide by voting which proposals should be funded. This crowdsourced community-managed model is shown below:

Crowdsourced and Community Managed Grants



An “Open Science” community, such as the Knowbella Platform™, accepts both proposals (A) for funding from community-based science projects and donations (B) from numerous sources, including individuals.

Proposals will have detailed a number of tranches, each defining:

- 1) Cost of research (inclusive of personnel, equipment and supplies);
- 2) Required duration of the tranche;
- 3) Clearly defined goals and outputs (publications, etc.).

Through a community-based peer-review and voting mechanism (C), the best proposals (that meet the above criteria) are selected.

When enough funds are available, the smart contract notifies all parties that the contract has been activated, starting the clock (D).

Initial activation unlocks funding (E) for the first tranche to the researchers and starts the countdown clock for the tranche.

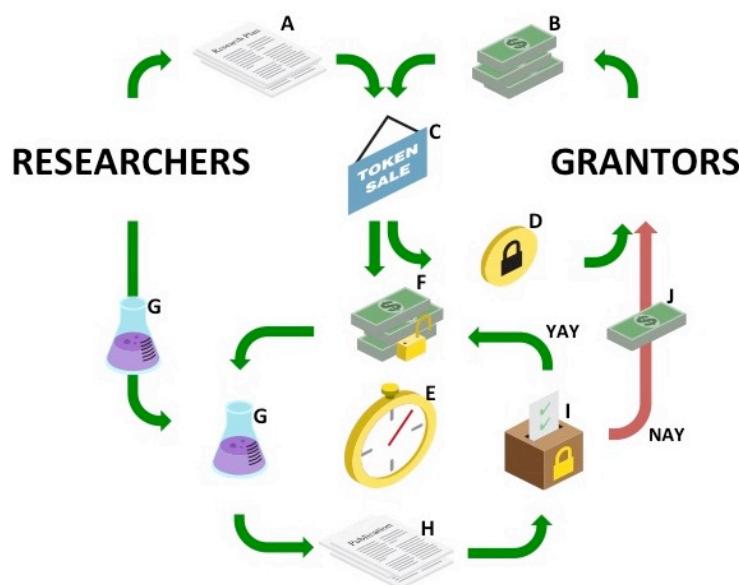
Researchers then perform the required science (F) with the objective of producing the deliverables (G) promised for this tranche of the proposal.

When the duration for the tranche runs out, there is a voting phase (H). At this point, the community will evaluate the progress of the research to ensure that it has met the key criteria: cost, duration and deliverables for that tranche.

If the community is suitably impressed (>50.1% of the votes agree that the output of the previous tranche satisfies its stated goals), then the contract automatically unlocks the funding (E) required for the next phase of work and starts the next tranche's countdown.

This cycle continues until the phases are exhausted, at which point the contract is complete, OR, at a point the community does not agree that the output of the phase has met the criteria. In this case, the contract fails and all remaining funds are automatically returned to the pool to be awarded to the next winning proposal (I).

Grantor-Sourced and Managed Grants



An “Open Science” community, such as the Knowbella Platform™, produces proposals (A).

Proposals will have defined a number of tranches, each defining:

- 1) Cost of research (inclusive of personnel, equipment and supplies);
 - 2) Required duration of the tranche;
 - 3) Clearly defined goals and outputs (publications, etc.).

When everything is clearly defined, it is encoded into a smart contract. This contract is published to the Ethereum blockchain and awaits the purchase (B) of grant tokens (D) by grantors.

When enough funds are secured from the sale (C) of grant tokens, the smart contract notifies all parties that the contract has been activated.

Initial activation unlocks funding (F) for the first tranche to the researchers and starts the countdown clock (E) for the tranche.

Researchers use the defined time (E) to perform the defined science (G) and produce the declared deliverables (H).

When the duration for the tranche runs out, there is a voting phase (I). At this point, each token holder votes (one token = one vote) whether they are satisfied that the output from the previous tranche of work matches the stated goals for that tranche.

If >50% (or other defined threshold) of the votes agree that the output of the previous tranche satisfies its goals, then the contract automatically awards the funding (F) required for the next phase of work and starts the next tranche's countdown.

This cycle continues until the phases are exhausted, at which point the contract is complete, OR, at a point where the voting grantors do not agree that the output of the phase has met the criteria. In this case, the contract fails and all remaining funds (J) are automatically returned (in proportion) to the token holders for future proposals.

The grant process flow:

- 1) Grant request for proposals (RFPs) are issued by philanthropic entities such as our partner Cavendish Global®, corporations, and institutions within the scientific communities hosted in the Knowbella Platform™. Based upon the proposals and the collaboration/participation of the proposer, the scientists in those communities vote on who should receive the grants.
- 2) Grant funding is managed on a blockchain for transparency and efficiency.
 - a) Transparency: Funds are traceable from the grantor all the way to the researcher.
 - b) Efficiency: With the confidence of the blockchain, more money goes to research and less goes to overhead accounting, legal, etc.

There is a backlash against charities where significant portions of donated monies are never actually used for the targeted research.¹² Wouldn't it be wonderful if all charities had perfectly transparent movement of all funds? This is especially important if grantors within the Knowbella Platform™ want their monies to go to a specific type of research. We will be able to demonstrate that this has occurred.

Any next generation platforms or social networks must enable peer review (back to the trust factor) and enable the recording of events on the blockchain (the trust factor) to be accessible to all. Any next generation platforms or social networks must ensure participation and contributions; and, to do this, the contributors must have recognition and financial rewards.

Scientific peer review is a huge component of the Knowbella Platform™. That includes peer review within the scientific communities as well as their output manuscripts on the preprint server. The blockchain helps the science be open and trusted.

This scientific network platform system starts with blockchain-based Helix™ tokens.

Helix™ Tokens

Why Helix™ Tokens?



Scientists are not compensated for the discrete research they accomplish. Providing “The Currency of Science™” Helix™ tokens to the researchers is a novel way to reward them for doing science as they are doing it. Helix as the “Scientific Currency™” will be the glue that holds the community together.

The Helix™ token serves multiple important functions for the Platform:

- Incentivizes scientists to collaborate within the Platform. Scientists get paid for what they used to do for free.
- Medium of exchange between scientists and vendors/service providers.
- Builds the Knowbella Tech brand and overcomes barriers.
- Cross border funding. There are no, or low, 3rd party fees to move research funds to the scientists, regardless of their country of residence.
 - Cross-border funding drives scale in the amount work that can be performed. So a dollar (or Helix™) in Africa or Venezuela buys considerably more than a dollar (or Helix™) in the United States.
- When more partners are trading in Helix™ within the Knowbella Platform™ network, the transaction costs are reduced for researchers purchasing of materials and goods. The result is more money that can be directed toward conducting research.
- Enables Helix™ token holders to guide the features and functions of the scientific community with voting rights in the Knowbella Platform™.
- Provides Helix™ token holders with economic rights to Knowbella Tech.

Knowbella Tech, through the ICO, will launch the Helix™ token for the global scientific community to serve as “The Currency of Science™” for researchers and scientific vendors around the world.

The Helix™ initial price is \$0.30 USD or equivalent amount of Ether, Bitcoin, or BitcoinCash.

The Company is working toward enabling the researchers to use Helix™ to purchase goods and services from the vendor network hosted through the Platform’s Asset Exchange.

The first use case of the Helix™ token will be with the scientific community currently being assembled by our sister company and partner, Open Therapeutics™ LLC. The Open Therapeutics’ Therapoid™ platform is in beta launch at <https://Therapoid.net> and has already attracted scientists around the world even though it is not being publicly promoted yet. The Therapoid™ platform is the proof-of-concept for Knowbella Tech. By providing Open Therapeutics scientists with Helix™ in exchange for accomplishing research tasks within the web platform, Therapoid™, we are simultaneously incentivizing user registrations, while creating liquidity for Helix™ ICO buyers.



It is critical to mention again that Knowbella Tech has exclusively licensed the Therapoid platform from Open Therapeutics for all non-therapeutic IP. Examples of IP categories that Knowbella Tech will be able

curate on its platform include agriculture, chemicals, mechanical and electrical engineered technologies, and life sciences.

Initially, Open Therapeutics may issue wallets and tokens as a “loyalty points” feature (similar to airline frequent flyer miles). Our intention is to convert the loyalty points into Helix™ at the ICO launch within each Open Therapeutics user wallet.

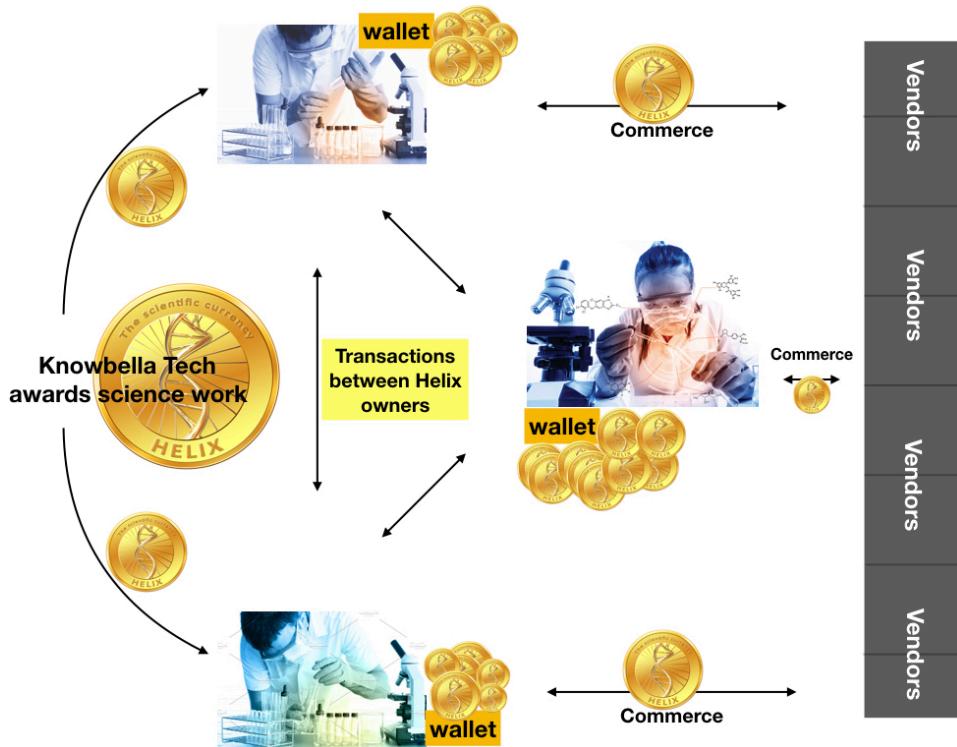
Helix™ Tokens and Wallets

Knowbella Tech will use an Ethereum ERC-20 smart contract standard for the Helix™ tokens. The Helix™, as “The Currency of Science™”, will be stored on the Ethereum blockchain in a smart contract.

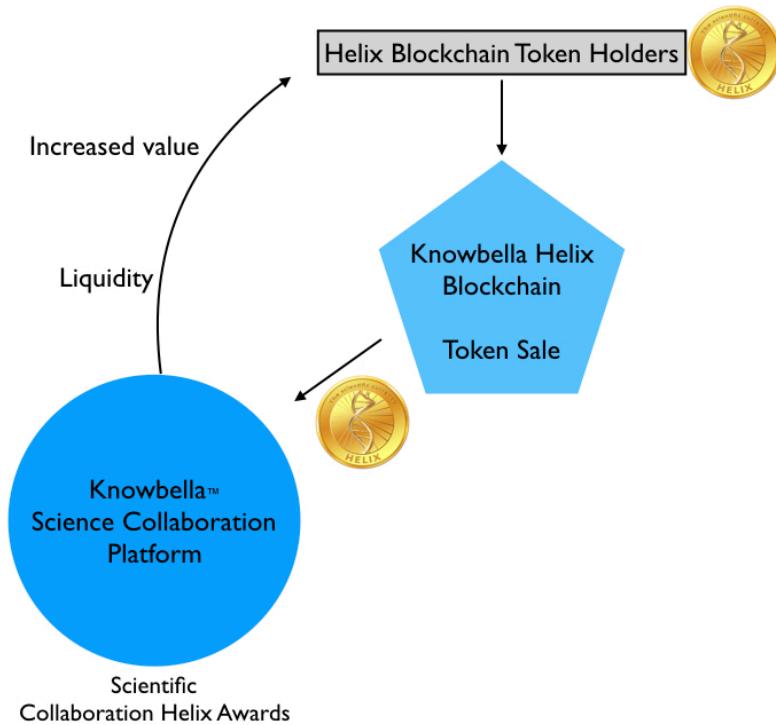
The wallet provided during user registration is a combination of a centralized database and the blockchain. During registration, the wallet is linked to the private key, but no one, including Knowbella Tech™, has access to the private key except the registrant. All registrants achieve an extra level of security with an email verification system that forces the registrant to validate their registered email address.

We are providing all registrants with Helix™ tokens and a digital wallet to “store and manage” those tokens. In this model, the wallets store the private keys for the addresses on the blockchain and facilitate the management of any Helix™ they contain.

The Helix™ tokens will be the “glue” that holds together the network of scientists and vendors. As scientists accumulate Helix™ from performing scientific tasks and for conducting “transactions” with other researchers, their Helix™ will be stored securely in their wallets and managed by the Ethereum blockchain. The Helix™ can be used to conduct “commerce” with vendors and service providers. The vendors are incentivized to accept Helix™ due to competitive pressures. With Helix™ on an exchange, vendors can convert to fiat currencies or other digital currencies such as Bitcoin, subject to confirmation that an SEC-registered exchange exists for Helix™ trading.



Helix™ Role & Economy



Inflation

The Company's goal is to create demand. Demand wards off inflation.

Early adoptor scientists are provided Helix™ for adopting the Platform. The scientists' contributions to research and collaboration on the Platform earn Helix™. Numerous activities of the scientific community can be rewarded in Helix™. Scientists will be able to utilize their tokens within the ecosystem for the purchase of goods and services otherwise paid for by traditional payment methods or fiat money. Hence, true token utility is created within the scientific community and within the ecosystem. This utility, combined with and the high number of scientists performing work, should be recognized by Helix™ token purchasers and should create a liquid market.

This fundamental ability to earn and exchange Helix™ for goods and services within the ecosystem, or simply to exchange them for other cryptocurrencies or local fiat currencies, is a huge incentive for active participants and the purchasers of the Helix™ token.

Voting Rights

Holders of Helix™ tokens are granted voting rights within Knowbella Tech. These include:

- 1) Scientific Advisory Board: voting rights with respect to structure, roles, and members. Knowbella Tech shall confidentially host such voting.
- 2) Annual conference location, agenda, and speakers.
- 3) Scientific community meeting (both on and offline) locations, agendas, and speakers hosted by Knowbella Tech.
- 4) Posters for presentation at meetings and conferences hosted by Knowbella Tech.
- 5) "Paper of the Week" hosted prominently on the Knowbella Platform™.

- 6) Funding grant proposals in response to Request for Proposals hosted by Knowbella Tech. That is, the Helix™ token holders can vote upon which RFPs should be funded. Then Knowbella Tech shall host the grant management on a blockchain. See the explanations about grant funding in the "[Why Blockchain?](#)" section.
- 7) Certain new features of the Knowbella Platform™.
- 8) Amendments to the Knowbella Tech LLC Agreement and/or Token Holders' Agreement that directly materially negatively impacts the scientific community hosted at Knowbella.

Economic Rights

Holders of Helix™ are granted certain economic rights of Knowbella Tech. These rights are related to the conversion of Helix™ to "Class H Units" (also known as "Units") of Knowbella Tech LLC. Upon the occurrence of a Token Conversion Event (as defined below), a holder of Helix™ has the option to convert Helix™ into Class H Units of the Company, pursuant to certain notice and verification procedures. The conversion ratio of Helix™ to Class H Units shall be 1:1 and both can be sub-divided as appropriate. A "Token Conversion Event" is defined as:

- 1) The sale, in a firm commitment underwritten public offering led by a nationally recognized underwriting firm pursuant to an effective registration statement under the Securities Act, of tokens or units (or common stock of the Company or an entity created for such initial public offering) having an aggregate offering value (net of underwriters' discounts and selling commissions) of at least \$30,000,000 following which at least twenty percent (20%) of the total tokens or units (or common stock of the Company or an entity created for such initial public offering) on a fully diluted basis shall have been sold to the public and shall be listed on any national securities exchange or quoted on the NASDAQ Stock Market System; or
- 2) The Company's Board of Managers elects to declare a Token Conversion Event, in its sole discretion; or
- 3) the filing by the Company of an application for the appointment of a trustee, a voluntary petition in bankruptcy, a general assignment for the benefit of the Company's creditors, or other similar bankruptcy proceeding.
- 4) After the occurrence of a Token Conversion Event and the running of all related notice periods, holders of Helix™ will retain their ownership of Helix™ tokens and all rights associated with Helix™ tokens, provided that the right to convert into Class H Units shall terminate.
- 5) Upon the occurrence of a Token Conversion Event, the Company shall provide notice to the holders of Helix of the occurrence of such Token Conversion Event by posting a written notice on the Knowbella Platform™ (the "Conversion Event Notice"). The Conversion Event Notice shall include the following information:
 - (a) The date of the Conversion Event Notice;
 - (b) The deadline by which the holders of Helix™ must submit their Token Conversion Notice to the Company;
 - (c) A description of the means by which holders of Helix™ shall submit the Token Conversion Notice to the Company (as reasonably determined by the Company's Board of Managers), which shall include options to submit the Token Conversion Notice by mail or overnight carrier;
 - (d) A description of information that the Board of Managers determines (in its sole discretion) is necessary for the Company to issue Class H Units of the Company, including, without limitation, the name and address of the person converting Helix™ to Class H Units; and
 - (e) Instructions on how to access and execute a joinder to the Company's LLC Agreement.

Upon such a conversion into Class H Units, holders of Class H Units are entitled to a share of the Company's profits, capped at 5% of the profits, upon a liquidation of the Company and after distributions

to all creditors of the Company, Class A members, Class B members and any other class of members created by the Company from time to time. It is possible that upon a liquidation of the Company, there may not be enough profits to satisfy the creditors, Class A members, Class B members or the Class H members and no such guarantee of profits can be made nor should it be relied upon by holders of Helix™ or Class H Units.

Helix™ Distribution

Helix™ tokens are being provided to both Knowbella Tech and Open Therapeutics. In both cases, as shown in the Table 1 example, the Company will provide Helix™ to scientists ("Users") for collaborating in the research ecosystem. The allocation shown in Table 1 is subject to change. Since Open Therapeutics has exclusively licensed Therapoid™ to Knowbella Tech, it is in Knowbella Tech's best interest to support the therapeutic aspect of scientific intellectual property crowdsourcing. Further, as Open Therapeutics continues to develop the Therapoid™ platform, Knowbella Tech may see those advancements reflected in its own platform due to the exclusive license terms.

 Token Allocation

| | | Value at Time of ICO | |
|--------------------------|---------------|----------------------|-----------------------|
| Tokens | Pct | Tokens | USD |
| Token Sales | 33.3% | 166,666,667 | \$ 50,000,000 |
| Knowbella | 56.7% | 283,500,000 | \$ 85,050,000 |
| Operations | 7.5% | 37,500,000 | \$ 11,250,000 |
| Knowbella Users | 46.7% | 233,500,000 | \$ 70,050,000 |
| Reserves | 2.5% | 12,500,000 | \$ 3,750,000 |
| Open Therapeutics | 10.0% | 50,000,000 | \$ 15,000,000 |
| Operations | 3.0% | 15,000,000 | \$ 4,500,000 |
| Therapoid Users | 5.0% | 25,000,000 | \$ 7,500,000 |
| Reserves | 2.0% | 10,000,000 | \$ 3,000,000 |
| | 100.0% | 500,000,000 | \$ 150,050,000 |

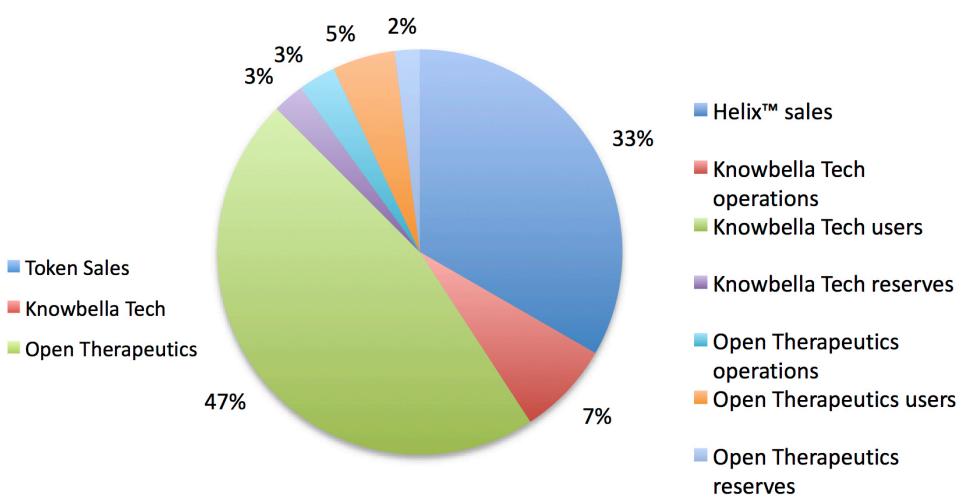
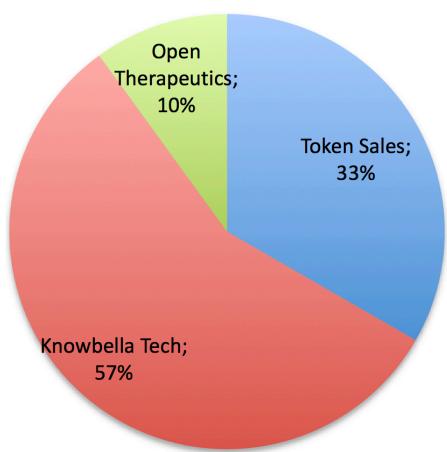


Table 1 and Charts: Helix™, "The Currency of Science™" Token Distribution Model (subject to change).

Incentive Plan for Scientists¹

Prior to Launch: In order to accelerate scientific collaboration on the Platform prior to the launch of the ICO, we may offer loyalty points for milestones and collaboration.

Post Launch: After the ICO, these loyalty points will be exchanged for Helix™. By having pre-existing scientists as loyalty point holders, a liquid ICO market is pre-positioned. Helix™ in turn can be converted into fiat or other cryptocurrencies (Bitcoin, Ether, etc.).

The process begins with the scientific registrant, via their ORCID, gaining a wallet within his/her Knowbella account. In exchange for registering (for free), the registrant is given Helix™ in the wallet (see Table 1 below).

Knowbella Tech will provide up to 500,000 early users (students, scientists, and citizen scientists), who freely register, a wallet, and a deposit of Helix™ just for signing-up. We want to be the scientific social network with the scientific currency where even non-scientists can participate in research collaboration.

More Helix™ are awarded for collaborations and tasks performed within the Knowbella Platform™. Helix™ tokens are stored in the user's wallet.

Token Award Menu

A healthy Helix™ ecosystem is paramount for Knowbella Tech, as is the development of a thriving, collaborative exchange of scientific research data and innovation. As a means of developing both, Helix™ rewards are listed in Table 2. However, this list will change periodically as required to reflect the changing value of Helix™ and the level of activity on the Knowbella Platform™.

In order to establish the Helix™ distribution system, we may begin with a loyalty point system. Those loyalty points can be converted to Helix™ as shown in Table 2. As such, in order to reach more scientists with Helix™ to create liquidity, we may reduce the number of Helix™ awarded for collaboration on the Knowbella Platform™.

As the value of Helix™ rises on the open market, the Company may reduce the reward for an activity while it maintains the same relative value to researchers. Likewise, if the value of Helix™ declines, rewards may be increased to continue to provide the incentive necessary to build critical mass on the Platform. By making these sorts of adjustments, Knowbella Tech can deliver the supply of available Helix™ to a larger number of scientists globally while still delivering the incentives necessary to rapidly develop a thriving scientific research community on the Knowbella Platform™.

Also, as the population of researchers demonstrates sufficient use of various features on the Platform, rewards for the use of those features may be reduced or even eliminated. Similarly, new Platform features or those, which have yet to reach target levels of activity, may result in increased levels of rewards.

The Helix™ award system will also help promote the network effect. As the scientists begin to collect Helix™, in their own best interest, they will promote the use of the Open Therapeutics' Therapoid™ platform and, soon thereafter, the Knowbella Platform™. As reported by Jain (2017), "The purpose of

¹ Subject to confirmation that SEC-registered exchanges exist for Helix™ trading.

doing an ICO for your blockchain project goes beyond just raising money. While capital is extremely important, the ICO has another powerful effect: It gets your tokens into the hands of people who are incentivized to help your network grow.”¹³



| Activity | Helix |
|--|-------|
| Registration via ORCID | 1.85 |
| Profile is completed | 1.85 |
| Registration for Hypothes.is (Annotations) account | 1.85 |
| Getting five new registrants (referral) | 9.26 |
| Joining a scientific group | 3.70 |
| Actively participating on a manuscript as a co-author | 5.56 |
| Serving as AuthorAID mentor or service user | 3.70 |
| Registering at Overleaf | 3.70 |
| Registering at Centers for Advancing Innovation (CAI) | 3.70 |
| Uploading data in community accepted format | 9.26 |
| Serving as a prepeer Reviewer | 3.70 |
| Uploading a manuscript to the preprint server | 18.52 |
| Preprint is published in a journal | 4.63 |
| Donating a working piece of lab equipment | 18.52 |
| Donating consumables | 5.56 |
| Applying for a grant | 1.85 |
| Achieve top three finalists of grant selection | 3.70 |
| Submit a highly rated, but unfunded grant, to OnPAR | 3.70 |
| Register with our partner F1000 | 1.85 |
| Participate reviewing a grant proposal | 4.63 |
| Issuing an RFP with funding greater than \$1000.00 USD (Other) | 37.04 |
| Issuing an RFP with funding greater than \$1000.00 USD (Cavendish) | 37.04 |
| Providing acceptable open biotechnology | 9.26 |
| Creating a new project that gains more than 3 members | 4.63 |
| Posting in forums (collaboration) | 1.85 |
| Posting or starting a “hot topic” | 1.85 |
| Starting and providing educational content | 18.52 |

Table 2: Helix™ Incentive Award System for Early Scientific Users.

Users will be able to purchase goods, such as lab and test equipment and consumables as well as future tools and services, using their Helix™. The researchers will be awarded grants in Helix™. In this way, we will integrate a financial system into the global scientific ecosystem.

We will also enable the non-scientific users to donate Helix™ to the scientists doing work through a “direct funding” model that converts the donations into Helix™, which in turn is awarded to the winning RFP proposals.

Technical Solution & Platform Architecture

- Based upon Ethereum blockchain
- Stack: Django/Linux/Python on AWS
- Integrations: OnPar, AuthorAID, ORCID, Hypothes.is
- APIs: Automated IP on-boarding

Business Model

Our platform business model will provide a scientific ecosystem that attracts users and producers to interact and yield valuable data, analytics, and innovations. The “open” model has proven to be successful with other industries such as Redhat® and Linux in open source computer programming. The Knowbella Platform™ will be an open repository for IP (as Github® is with open source projects); and, as a platform, we match IP producers (inventors) with IP consumers (researchers/scientists).

Once we have collected the users within the Knowbella Platform™, the Company seeks to (1) monetize data and analytics, (2) sell analytics to for-profit companies, and (3) strategically selects and further develops assets from the community.

Once we have attracted the global scientific community, business models and revenue streams will follow. Those revenue streams can include:

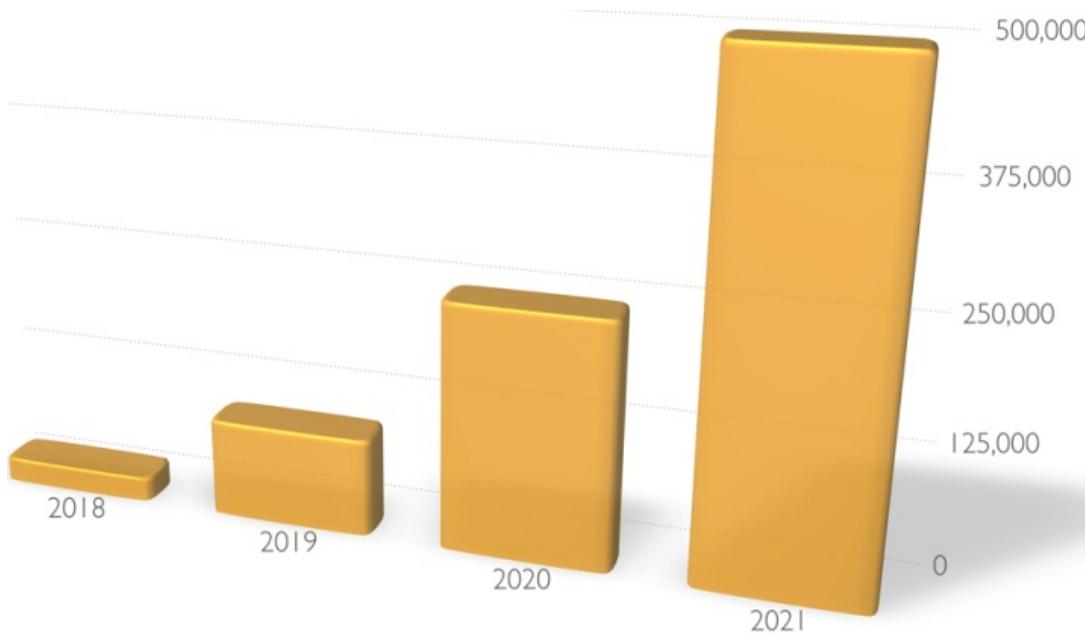
- Selling analytics and subscriptions to industries for human resources, marketing intelligence, and competitive intelligence decision-making support.
- Equipment and consumables advertising and sales commission.
- Private enterprise version (white label) collaboration platform based upon the Knowbella Tech Platform. This enables other organizations to use the Knowbella Platform™ in their private environments.
- Incubate and spinout companies that use and promote Helix™.
- Consulting services and supplemental R&D services to private industry.
- IP offices to create potential value for their IP.
- Marketing non-orphan IP for institutional technology transfer officers (TTOs).
- Hosting Innovation Challenges.

Projections

In order to generate revenues, the Knowbella Platform™ must attract and keep scientific users. We intend to do this with a superior platform experience, orphan intellectual properties from institutions around the world, and Helix™ tokens for economic network effect.

Through a significant partnership, our goal is to recruit nearly 3,000,000 scientists already collected in the partner’s database.

As a result of our efforts, we project the following scientific user growth:



In order to be a sustainable Company and provide value to our equity and token holders, we must generate revenues. From a number of revenue streams, we project gaining revenues.

Competitive Landscape

- Research Gate® - Enables collaboration around post-published papers.
- Innoget® - innovation challenges for developing IP.
- Facebook® - social platform.
- LinkedIn/Microsoft® - user biographical information.
- Redhat® - monetizing open technologies.
- GitHub® - hosts open source technologies.
- Biowebspin® - scientific biographical information.
- Open Science Framework™ (OSF) - open science platform for manuscript development.

Addressable Market

Firms that would be interested in data and analytics developed from the researchers collaborating upon the Knowbella Platform™ include:

- Pharmaceutical companies
- Governments
- Agriculture companies
- Chemical companies
- Synthetic biology firms
- Energy and water firms
- Consumer product firms
- Any organization with a research and development (R&D) function

Project Roadmap and Timeline

Company Development Timeline

January 2009: Open Therapeutics launched as DBA, "Pilus Energy" (Phase 1).

January 2014: Pilus Energy moved to subsidiary and acquired by Tauriga Sciences, Inc.

January 2014: Pilus Energy is renamed to Bacterial Robotics (Phase 2).

February 2015: As a result of gaining viral oncolytic immunotherapy, Bacterial Robotics renamed to Microbial Robotics (Phase 3).

May 2016: Microbial Robotics renamed to Open Therapeutics (Phase 4).

September 2016: Knowbella Tech founded, exclusively licensing Open Therapeutics Therapoid™ platform for all non-therapeutic IP (Phase 5).

April 2018: Populate Therapoid user wallets with Helix™.

April 8 – 22, 2018: Pre-sale launch of Helix™ Initial Coin Offering (ICO).

May 23 – June 4, 2018: Helix™ ICO.

June 4, 2018: Helix™ listed on cryptocurrency exchange(s).

August 2018: Knowbella Tech seeks to acquire Open Therapeutics to round out the entire IP portfolio and consolidate Platforms.

December 2018: Seek to reverse merge Knowbella Tech into publicly traded company.

December 2019: Seek to uplist Knowbella Tech to NASDAQ.

Corporate Development

Also critically focused on:

1. Developing the team.
2. Developing the product (see timeline provided above). Knowbella Tech already has exclusive license with two pending U.S. patents for the Platform and blockchain grant-funding model.
3. Increase marketing to gain more scientific users.
4. Collect more IP.
5. Gain grant-funding partners.
6. Gain more surplus lab equipment from vendors to offer to the scientists for free, using their Helix™ to ship the equipment and pay for power conversion and maintenance.

Team

Management



Mr. Mark Pohlkamp, CEO and Board Member: A highly experienced senior executive in the electronic medical record space. Previously started a technology firm and exited that firm. Experiences include working with publishing firms such as Elsevier®. Also has executive experience working with firms such as Autodesk®. He has a mechanical engineering degree from University of Missouri and an MBA from Xavier University. <https://www.linkedin.com/in/markgpohlkamp/>.



Ms. Laura Cannon, Consulting, Software Developer. A start-up specialist with over twenty years of experience in media and technology, with a career defined by leading-edge emerging technologies from the early days of the web to digital payments. She brings an exceptional blend of strategic, creative, and organizational proficiency that has been instrumental in the success of innovative organizations and their clients. She thrives on solving problems, making connections, finding creative solutions, and bringing separate elements together into something that did not exist before. <https://www.linkedin.com/in/lauracannonmaine/>.



Mr. Martin Koistinen, Consulting Director of Software Development: A 25-year experienced software engineer whose experience spans information security, smart cards, biometrics, crypto-currency mining, blockchain, machine learning and more. Martin has led leading-edge projects in the public and private sector for multinational telecoms, energy, financial and other institutions across Europe and the USA. Although he has experience in countless programming languages, Martin is currently focused on Django and Python and serves as a core developer for globally popular open sources packages such as djangoCMS and related packages. <https://www.linkedin.com/in/mkoistinen/>.



Mr. Kelly Land, Advisor & Board Member: Nearly twenty years as both an investor and advisor to numerous companies throughout the U.S. and international markets. His passion is working with unique, promising seed stage and early stage technology companies. He has experience in a number of industries including software, ecommerce, medical device, and manufacturing, having participated in over fifty transactions. With a focus on blockchain and open science, Mr. Land believes in being a first mover in breakthrough technologies and businesses. He has a Bachelor's Degree in Mechanical Engineering from Rose Hulman Institute of Technology. <https://www.linkedin.com/in/kelly-land-469202/>.



Mr. Jason E. Barkeloo, Founder and Board Chair of Knowbella Tech and its sister company, Open Therapeutics. The concept of crowdsourcing the entire global scientific community was founded nine years ago after two previous startups. He completed a US Army career, including as laboratory operations officer of the Walter Reed Army Institute of Research; BA, Ohio State University; MA, Antioch University. <https://www.linkedin.com/in/jasonebarkeloo/>.

Advisory Board

Peter McCrea: President and a Director of the Cavendish Impact Foundation, a donor advised Impact Investment platform. He began his career in his native California as a film editor, writer and cinematographer. He was a founding member of the American Cinema Awards Foundation, benefitting

the Motion Picture and Television Fund. Subsequently, Peter was a partner at Americana Land Company, designing environmentally sustainable land developments. After moving to the East Coast in 1995, he served as Director of Development at LHO Group for Leif H. Olsen, former Chief Economist of Citibank, and since 2009 has been an acquisitions advisor for Hinduja Group, a multinational corporation. Before joining the Cavendish Impact Foundation, Peter was Vice President of Development at American Endowment Foundation with over 4,700 donor advised fund clients in all 50 states, and he was a Business Development Advisor at Foundation Source with 1,500 foundations and \$9 billion in assets. Peter was also a member of the Board of Directors of the Morgan Stanley Global Impact Funding Trust, and served as Chairman of the Livelihoods Council at Save the Children. Since 2001, Peter has been a Trustee of the Lemmon Foundation, a conservation foundation.

Dr. Roland Everett Langford: He has more than 40 years experience in environmental protection, occupational safety and health, and radiation protection. He holds Ph.D. degrees in Physical Chemistry from the University of Georgia and in Radiation Health Physics from the University of North Carolina at Chapel Hill, as well as a Masters degree in thermodynamics from the University of Georgia. In addition to academic degrees, he is a Certified Industrial Hygienist, a Certified Safety Professional, a licensed Professional Engineer in the State of Texas, a Certified Professional Environmental Auditor, a Certified Process Safety Auditor, a Fellow of the American Institute of Chemists, a Diplomate of the American Academy of Sanitarians, a Registered Hazardous Materials Professional, a Board Certified Environmental Scientist, and a registered Sanitarian. Dr. Langford is the author or co-author of three books (on Hazardous Materials Incidents, Workplace Drug Abuse, and Weapons of Mass Destruction). He served for twenty years in the U.S. Army Medical Department, retiring in the rank of Lieutenant Colonel, following command of the Army Research Detachment for Toxicology of the Walter Reed Army Institute of Research. He served with NATO in Bosnia and Croatia, receiving both the NATO Yugoslavia Medal and the Armed Forces Expeditionary Medal. He was awarded the Legion of Merit among other decorations. He worked in industry with the Huntsman Petrochemical Corporation, then as a Department of the Army civilian. He lived and worked in Korea and the Peoples Republic of China. Prior to military career, he was a college professor of chemistry and geology.

Raymond Scalettar, MD, DSc, FACP: A practicing physician specializing in Rheumatology and Internal medicine in Washington DC. He is Clinical Professor Emeritus of Medicine at the George Washington University Medical Center, Master of the American College of Rheumatology, a Fellow of the American College of Physicians and a distinguished Fellow of the American Psychiatric Association. He was instrumental in the development of the world class National Rehabilitation Hospital and was its first Medical Staff President. Affordable, quality medical care for patients has been a foremost objective throughout his professional career. He was elected to the Board of Trustees of the American Medical Association and ultimately its Chair; he was a Commissioner and later a Consultant to the Joint Commission on Accreditation of Healthcare Organizations; he helped form and was an executive in a physician owned professional liability organization, NCRIC. He is a Medical Expert Consultant to the Social Security Administration and a Consultant to the American College of Rheumatology.

Jeffrey S. Wallace: Professor of Personal Finance at Snow College and an active Real Estate, Private Business, and Cryptocurrency Investor. He completed his graduate work at Utah State University with an emphasis in Family-Owned Businesses (Determinants of Business Success and Profitability) and possesses an active Utah real estate license. He is an expert negotiator, business consultant, and a highly rated professor of Business and Social & Behavior Sciences. Jeff has published many articles related to business and personal finance and is an avid blockchain technology advocate.

ICO Terms & Conditions

- Pre-Token Generation Event
- Total available Helix™ tokens: 500,000,000
- Price \$0.30 USD
- Ticker: HLX
- Type: ERC20
- Helix™ is freely transferable
- Token Distribution and Allocation: See [Helix™ Token Distribution](#) section

Legal

Knowbella Tech has retained legal counsel with the Keating, Muething & Klekamp, PLL law firm, Cincinnati, Ohio, to guide us through our ICO.

This whitepaper is a “living document” and will not be static. As a result, continuous updates should be expected. The reader should always gain the most-up-to version at <https://Knowbella.Tech>.

THIS WHITEPAPER DOES NOT CONSTITUTE EITHER AN OFFER TO SELL OR AN OFFER TO PURCHASE SECURITIES. THIS WHITEPAPER INTENDED TO BE A SUMMARY ONLY AND SHOULD NOT, IN ANY INSTANCE, BE RELIED UPON IN PLACE OF THE COMPANY'S CONFIDENTIAL PRIVATE PLACEMENT MEMORANDUM.

Supplemental Literature

Julio Saez-Rodriguez, James C. Costello, Stephen H. Friend, Michael R. Kellen, Lara Mangravite, Pablo Meyer, Thea Norman and Gustavo Stolovitzky, “Crowdsourcing biomedical research: leveraging communities as innovation engines,” Nature, August 2016.

Vivien R. Bonazzi, Philip E. Bourne, “Should biomedical research be like Airbnb?,” PLOS Biology, <https://doi.org/10.1371/journal.pbio.2001818>, Volume 17, April 7, 2017.

Ivy Shih, “International research collaborations on the rise,” Nature Blog, <http://www.natureindex.com/news-blog/international-research-collaborations-on-the-rise>, November 15, 2016.

Brian L. Strom, M.D., M.P.H., Marc E. Buyse, Sc.D., John Hughes, B.Sc., and Bartha M. Knoppers, Ph.D., “Data Sharing — Is the Juice Worth the Squeeze?,” The New England Journal of Medicine, October 27, 2016.

Effrey Perkel, “Democratic Databases: Science on Github,” Nature, Volume 538, October 2016.

John Bohannon, “Who's downloading pirated papers? Everyone, In rich and poor countries, researchers turn to the Sci-Hub website.” Nature, Posted in Scientific Community, doi:10.1126/science.aaf5664, April 28, 2016.

Bryn Nelson, “Culture Divide: Synthetic biology is facing a tug of war over whether to patent its discoveries or embrace open-source innovation,” Nature, Volume 509, May 8, 2014.

Philip Ball, "Leading mathematician launches arXiv 'overlay': Journal that reviews papers from preprint server aims to return publishing to the hands of academics," *Nature*, doi:10.1038/nature.2015.18351, October 1, 2015.

Frank Grassler and Mary Ann Capri, "Patent pooling: Uncorking a technology transfer bottleneck and creating value in the biomedical research field," *Journal of Commercial Biotechnology*, Volume 9, Number 2, January 2003.

Ewen Callaway, "Crowdsourcing digs up an early human species: Palaeoanthropologist invites excavators and anatomists to study richest fossil trove in Africa," *Nature*, doi:10.1038/nature.2015.18305, September 10, 2015.

Alice Williamson, "International team of scientists open sources search for malaria cure," Reddit, <https://opensource.com/life/14/6/international-team-open-sources-search-malaria-cure>, June 10, 2014.

Mary Ellen McIntire, "Librarians Leap to the Aid of Researchers Whose Funding Will Soon Depend on Open Access," *The Chronicle of Higher Education*, July 30, 2015.

Lola Butcher, "Cancer-Related Crowdsourcing and Crowdfunding Move Beyond the Basics: Many Active Projects Ongoing in Myeloma," *Oncology Times*, May 25, 2015.

Ethan R. Fitzpatrick, "Open Source Synthetic Biology: Problems and Solutions," *Student Scholarship*, Paper 47, January 1, 2013.

Annette Bakker, "Corner Office: Uprooting the Foundation Innovation and collaboration are the only way to success," *NonProfit Pro*, April 2015.

Hassan Masum, Aarthi Rao, Benjamin M. Good, Matthew H. Todd, Aled M. Edwards, Leslie Chan, Barry A. Bunin, Andrew I. Su, Zakir Thomas, Philip E. Bourne, "Ten Simple Rules for Cultivating Open Science and Collaborative R&D," *PLOS Computational Biology*, Volume 9, Issue 9, September 2013.

Jose Luis Ortega, "Academic Social Networks: Collaborative Environments or Diogenes Clubs?," *The Scholarly Kitchen*, December 8, 2016.

Eric D. Peterson, MD, "Putting Our Shoulders to the Wheel: Thoughts on Data Sharing," *Applied Clinical Trials*, November 30, 2016.

Fiona Murray, Scott Stern, "Do formal intellectual property rights hinder the free flow of scientific knowledge? An empirical test of the anti-commons hypothesis," *Journal of Economic Behavior & Organization*, Volume 63, January 16, 2007.

Citations

¹ Hovis, Jeff. "*Orphan*" Technologies...Leaving Four Trillion Dollars in Value on the Shelf, ISPIM Innovation Insights, Product Genesis, April 2014.

² IBID.

³ *The Economic Contribution of University/Nonprofit Inventions in the United States: 1996-2015*, June 2017. Accessed at <https://www.bio.org/sites/default/files/June%202017%20Update%20of%20I-0%20%20Economic%20Impact%20Model.pdf>, December 20, 2017.

⁴ *Tauriga Sciences Inc. Completes Acquisition of Innovative Synthetic Biology Firm Pilus Energy LLC and Positions Itself in Nascent \$10 Billion Annual Wastewater-to-Value Market*, 2014 accessed December 20, 2017 at <https://globenewswire.com/news-release/2014/01/28/605241/10065748/en/Tauriga-Sciences-Inc-Completes-Acquisition-of-Innovative-Synthetic-Biology-Firm-Pilus-Energy-LLC-and-Positions-Itself-in-Nascent-10-Billion-Annual-Wastewater-to-Value-Market.html>

⁵ Attribution 4.0 International (CC BY 4.0). Accessed December 20, 2017 at <https://creativecommons.org/licenses/by/4.0/>.

⁶ Copyleft. Accessed December 20, 2017, <https://en.wikipedia.org/wiki/Copyleft>.

⁷ Isaac Newton, Wikipedia. Accessed December 20, 2017 at https://en.wikipedia.org/wiki/Isaac_Newton.

⁸ Hovis, Jeff. ISPIM Innovation Insights, Product Genesis, April 2014.

⁹ IBID.

¹⁰ WikiQuotes, *Jonas Salk*, accessed December 11, 2017 at https://en.wikiquote.org/wiki/Jonas_Salk.

¹¹ Juan Benet, *IPFS – Content Addressed, Versioned, P2P File System (Draft 3)*, accessed 22 December 2017.

¹² *Federal suit charges cancer charities' \$187 million in donations actually funded Disney World trips, dating services*. Accessed December 20, 2017 at <http://www.nydailynews.com/news/national/cancer-charities-misused-187-million-donations-feds-article-1.2228056>.

¹³ Tushar Jain, 25 November 2017, "Making sense of this year's outrageous ICOs", VentureBeat.